

Application No.: 09/874,510

Docket No.: JCLA9803

IN THE SPECIFICATIONS

Please amend the paragraph beginning at line 12, page 4 as follows:

Accordingly, there is needed a selective hopping method for hit avoidance and the system therefor, which may effectively utilize the ~~available~~ available channels in the communications system. The present invention is a selective hopping method for hit avoidance in a frequency hopping spread spectrum communication system utilizing an original hopping sequence, having a plurality of available channels for receiving signal packet traffic utilizing a plurality of receiving signal slots are disclosed. The plurality of available channels all are available for use in frequency hopping. The method comprises the steps of dividing the plurality of available channels into a plurality of partitions; distributing the available channels in each of said plurality of partitions into a predetermined distribution; forming a partition sequence by assigning a predetermined number of channels to a plurality of selected receiving signal slot sets; generating a generated hopping sequence by partition mapping from the original hopping sequence, wherein said partition mapping is responsive to said partition sequence; and managing the receiving signal packet traffic, whereby the receiving signal packet traffic is transmitted only in said selected receiving signal slot sets.

Please amend the paragraph beginning at line 2, page 9 as follows:

The present invention creates a fourth partition for these good channels. Note that the size of each partition can vary significantly, therefore for a general case, there is the problem of variable and unequal size partitions. To deal with this situation, two more modifications are made in the present invention. The SHHA system incorporates a small set of partition sequences which are designed and stored in a table, then one partition sequence is selected from this set. Since it is not possible to design such a small set which incorporates the many possibilities in the general case,[[[-]] the present invention first utilizes an algorithm for partition sequence generation. Secondly, the partition mapping is modified for unequal partition sizes.

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Please amend the paragraph beginning at line 1, page 21 as follows:

System Architecture. The system architecture in the preferred embodiment of the present invention is shown in FIG 3. In system 300 of the present invention, a hopping sequence generator 314 has a hop clock input 301, so as to provide a system clock, and has an output being connected to a multiplexer 312 and a partition ~~mapper~~³¹³ mapper 313. A partition sequence change processor 319 provides the process for changing the partition sequence and has an output connected to an original/mapped sequence selector 316. A partition sequence generator 317 has hop clock input 301, traffic requirement input 302, channel usage requirement input 303 and channel partitioner 318, and serves as a generator of a partition sequence. The output of the partition sequence generator 317 is connected to a partition mapper 313. The partition mapper 313 has inputs from the hopping sequence generator 314 and partition sequence generator 317. The partition mapper 313 serves to map the partition sequence into a new hopping sequence. The original/mapped sequence selector 316 serves to select a hopping sequence and then provides the selected result to multiplexer 312. Multiplexer 312 receives the signals from the hopping sequence generator 314, partition mapper 313 and original/mapped sequence selector 316 so as to determine a hop frequency.

Please amend the paragraph beginning at line 6, page 31 as follows:

Synchronous Traffic Management. Synchronous traffic is defined as link-based and reservation-based. Synchronous traffic manager 711 first receives a link request 701, and channel interference measurement and channel partitioning information 720 to form a link having predetermined traffic parameters. Upon acceptance of the link request 701, synchronous traffic manager 711 reserves a series of time slots for link request 701. Traffic manager 711 replies to the request, utilizing the following algorithm in one embodiment of the present invention: